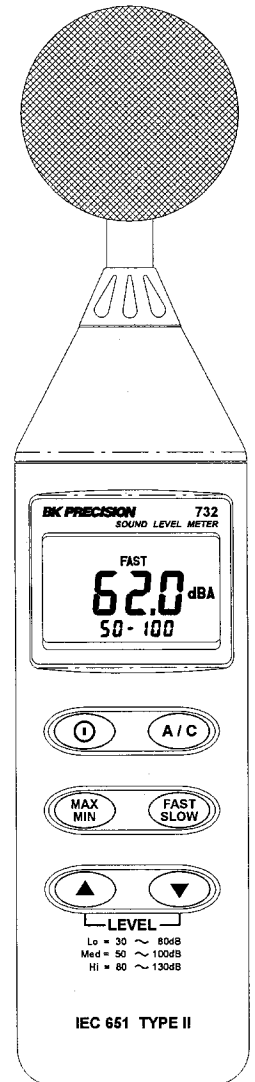


BK PRECISION® 732

Instruction Manual



CE
SOUND LEVEL METER

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I. Safety Information

Read the following safety information carefully before attempting to operate or service the meter.

Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.

Environment conditions

- ① Altitude up to 2000 meters
- ② Relatively humidity 90% max.
- ③ Operation Ambient 0 ~ 40°C

Maintenance & Clearing

- ① Repairs or servicing not covered in this manual should only be performed by qualified personnel.
- ② Periodically wipe the case with a dry cloth. Do not use abrasives or solvents on this instruments.

Safety symbols



Meter is protected throughout by double insulation or reinforced insulation. When servicing, use only specified replacement parts.



Comply with EMC

II. General Description

Thank you for using our Sound Level Meter. To ensure that you can get the most from it, we recommend that you read and follow the manual carefully before use.

This unit conforms to the IEC651 type2, ANSI S1.4 Type2 for Sound Level Meters.

This Sound Level Meter has been designed to meet the measurement requirements of safety Engineers, Health, Industrial safety offices and sound quality control in various environments.

- Ranges from 30dB to 130dB at frequencies between 31.5Hz and 8 KHz.
- Display with 0.1dB steps on a 4-digits LCD.
- With two equivalent weighted sound pressure levels, A and C.
- Both AC and DC signals output is available from Both standard 3.5mm coaxial socket suitable for a frequency analyzer, level recorder, FFT analyzer, graphic recorder ; etc.

III. Specifications

Standard applied : IEC651 Type2, ANSI S1.4 Type2.

Frequency range : 31.5Hz ~ 8KHz

Measuring level range : 30 ~ 130dB

Frequency weighting : A / C

Microphone : 1/2 inch electric condenser microphone

Display : LCD

Digital display : 4 digits

Resolution: 0.1dB

Display Update: 0.5 sec.

Time weighting : FAST (125mS), SLOW (1 sec.)

Level ranges : Lo: 30 - 80 dB

Med: 50 - 100 dB

Hi: 80 - 130 dB

Accuracy : ± 1.5 dB (under reference conditions)

Dynamic range : 50 dB

Alarm function : " OVER " is shown when input is more than upper limit of range.

" UNDER " is shown when input is Less than lower limit of range.

MAX / MIN hold : Hold readings at the Maximum and Minimum Value.

AC output : 1 Vrms at FS (full scale).

output impedance : Approx. 50 Ω

FS: means the upper limit of each level range.

DC output : 10mV / dB , output impedance approx. 100 Ω

Power supply : One 9V battery, 006P or IEC 6F22 or NEDA 1604.

Power life : About 50hrs (alkaline Battery)

AC adapter : Voltage 9 VDC (8-15VDC Max)

Supply current: > 30mADC

Socket: pin \rightarrow Ground

Casing \rightarrow Positive

External Diameter \rightarrow 3.5mm

Internal Diameter \rightarrow 1.35mm

Operation temperature : 0 to 40°C (32 to 104°F)

Operation humidity : 10 to 90%RH

Storage temperature : -10 to 60°C (14 to 140°F)

Storage humidity : 10 to 75%RH

Dimensions : 275 (L) x64 (W) x30 (H)mm

10.8 (L) x2.5 (W) x1.2 (H)inch

Weight : 275g (including battery)

Accessories : 9V battery, carrying case. Screwdriver, Instruction manual. Windscreen, 3.5 ϕ

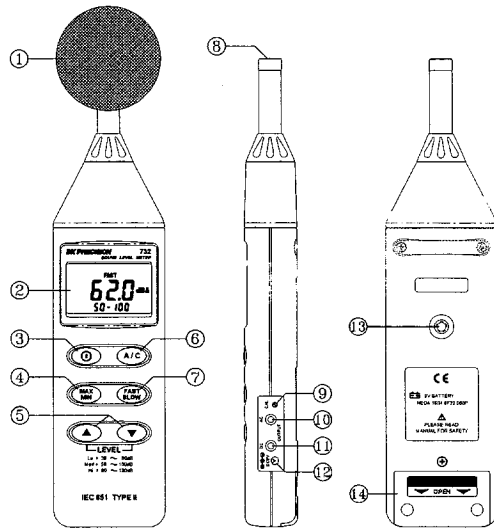
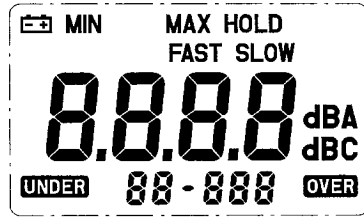
plug.

IV. Name And Functions

① **Windscreen**

If you operate at wind speed over 10m/sec, please put protective accessories in front of the microphone.

② **Display**



SYMBOL FUNCTION

- LCD** 4 digits
- MAX** Maximum Value hold
- MIN** Minimum Value hold
- FAST** Fast response
- SLOW** Slow response
- 00-000** Range Indicate

SYMBOL FUNCTION

- dBA** A-Weighting
- dBC** C-Weighting
- OVER** Over range
- UNDER** Under range
- +** Low-Battery
- LO-** Under range 20dB

③ **Power Switch**

the ① key turns the sound level meter ON or OFF.

④ **MAX / MIN hold switch**

Press **MAX/MIN** button to enter the maximum and minimum recording mode. Select the proper Level range before using MAX/MIN to ensure that reading value will not exceed the measurement range. Press once to select MAX value. Press again to select MIN value, and press again to select current Value with " MAX MIN " enunciator blinking. Press and hold down **MAX/MIN** button for 2 seconds to exit the MAX MIN mode.

Note:

If you change sound level range or change A-C weight, the MAX.MIN mode will clear. Sampling rate: 160ms

⑤ **Level range control switch**

Each time the UP switch ▲ is pressed. The level range increments from " Lo " Level to " Hi " Level range. Each time the DOWN switch ▼ is pressed. The range decreases from " Hi " Level to " Lo " Level range.

⑥ **Frequency Weighting select switch**

A : A - Weighting. for general sound level measurements.
C : C - Weighting. for checking the low-frequency content of noise.
(If the C-Weighted level is much higher than the A-weighted level, then there is a large amount of low-frequency noise)

⑦ **Time weighting select Switch.**

FAST : for normal measurements
SLOW : for checking average level of fluctuating noise.

⑧ **Microphone**

1/2 inch Electric Condenser microphone

⑨ **CAL potentiometer**

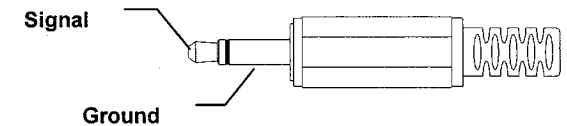
Calibration control , For level calibration adjustment.

⑩ **AC output terminal**

1 Vrms Corresponding to each range step.
Output impedance ≈ 50Ω
Output signal by standard 3.5mm coaxial socket signal on pin.

⑪ **DC output terminal**

Output : 10mV/dB
Output impedance ≈ 100Ω
Output signal by standard 3.5mm coaxial socket signal on pin.



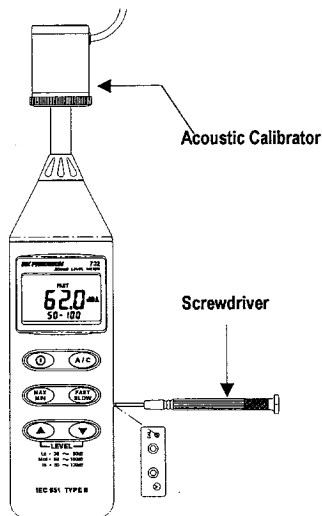
⑫ **External DC 9V power supply terminal**

For connection with AC adapter.

⑬ **Tripod mounting screw.**

⑭ **Battery Cover**


V. Calibration Procedures



Using a standard Acoustic Calibrator (94dB , 1KHz Sine wave)

1. Make the following switch settings.
Display: dBA
Time weighting : FAST
Measurement mode : MAX MIN Mode function disable.
Level range : 50 to 100dB
2. Insert the microphone housing carefully into the insertion hole of the calibrator.
3. Turn on the switch of calibrator and adjust the CAL potentiometer of the unit . The level display will indicate the desired level . Our products are all well calibrated before shipment.
Recommended Recalibration cycle : 1 year.

VI . Measurement Preparation

- (1) **Battery Loading**
Remove the battery cover on the back and put in one 9V Battery.
- (2) **Battery Replacement**
When the battery voltage drops below the operating voltage, mark  appears . If it appears, battery should be replaced with new one.
- (3) **AC Adapter Connection**
When the AC adapter is used , insert the plugs of the adapter into the DC9V connector on the side panel.

VII. Operating Precautions

- (1) Wind blowing across the microphone will add additional extraneous noise.
Once using the instrument in the presence of wind , it is a must to mount the windscreen to not pick up undesirable signals.
- (2) To achieve more accurate measurement, use an extension cable to separate the Microphone from the main body so that the effect of unexpected sound reflection can be eliminated.
- (3) Calibrate the instrument before operation if the instrument was not in use for a long time or operated at bad environment.
- (4) Do not store or operate the instrument at high temperature and high humidity environment.

- (5) Keep microphone dry and avoid severe vibration.
- (6) Please take out the battery and keep the instrument in low humidity environment. When not in use.

VIII. Measurement

- (1) Open battery cover and install a 9-volt battery in the battery compartment.
- (2) Turn on power and select the desired response Time and weighting. If the sound source consists of short bursts or only catching sound peak, set response to FAST. To measure average sound level, use the slow setting.
Select A- weighting for general noise sound level and C-weighting for measuring sound level of acoustic material.
- (3) Select desired Level
- (4) Hold the instrument comfortably in hand or fix on tripod and point the microphone at the suspected noise source , the sound pressure level will be displayed.
- (5) When MAX MIN (maximum, minimum hold) mode is chosen. The instrument captures and holds the maximum and minimum noise level for a long period using any of the time weightings and ranges.
Press the MAX MIN button for 2 seconds to clear the MAX/MIN reading. " MAX/MIN " symbol disappears.
- (6) Turn OFF the instrument and remove battery when not in use.

Service Information

Warranty Service: Please return the product in the original packaging with proof of purchase to the below address. Clearly state in writing the performance problem and return any leads, connectors and accessories that you are using with the device.

Non-Warranty Service: Return the product in the original packaging to the below address. Clearly state in writing the performance problem and return any leads, connectors and accessories that you are using with the device. Customers not on open account must include payment in the form of a money order or credit card. For the most current repair charges contact the factory before shipping the product.

Return all merchandise to B&K Precision Corp. with pre-paid shipping. The flat-rate repair charge includes return shipping to locations in North America. For overnight shipments and non-North America shipping fees contact B&K Precision Corp..

B&K Precision Corp.
22820 Savi Ranch Parkway
Yorba Linda, CA 92887
Phone: 714-237-9220
Facsimile: 741-237-9214
Email: sevice@bkprecision.com

Include with the instrument your complete return shipping address, contact name, phone number and description of problem.

Limited one-Year Warranty

B&K Precision Corp. warrants to the original purchaser that its product and the component parts thereof, will be free from defects in workmanship and materials for a period of one years from the date of purchase.

B&K Precision Corp. will, without charge, repair or replace, at its' option, defective product or component parts. Returned product must be accompanied by proof of the purchase date in the form a sales receipt.

To obtain warranty coverage in the U.S.A., this product must be registered by completing and mailing the enclosed warranty card to B&K Precision Corp., 1031 Segovia Circle, Placentia, CA 92870 within fifteen (15) days from proof of purchase.

Exclusions:

This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alternations or repairs. It is void if the serial number is alternated, defaced or removed.

B&K Precision Corp. shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific rights and you may have other rights, which vary from state-to-state.

Model Number: _____ Date Purchased: _____